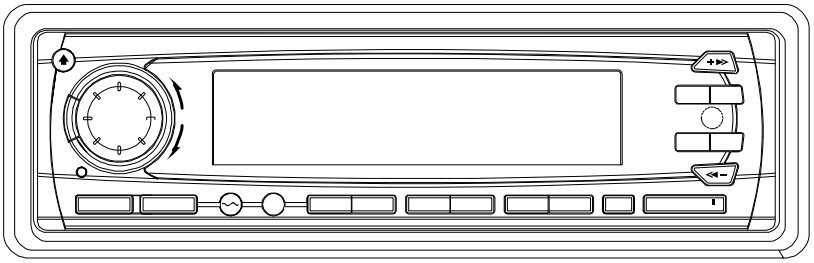
OWNER'S MANUAL

Mobile Audio System



- **PLL Synthesizer Stereo Radio**
- **RDS (Radio Data System) operation**
- **DAB (Digital Audio Broadcast) Operation**
- **Digital Compact Disc Player**
- **Automatically Memory Storing**
- **Fold Down Full Detachable Panel**
- **Preset Equalization**
- **Electronic Shockproof (ESP) Function**
- **Remote Control**

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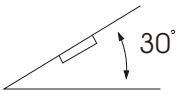
INSTALLATION

Notes:

- Choose the mounting location where the unit will not interfere with the normal driving function of the driver.
- Before finally installing the unit, connect the wiring temporarily and make sure it is all connected up properly and the unit and the system work properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop,like an emergency stop.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.



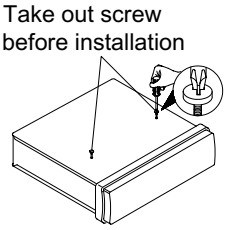
- Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

DIN FRONT/REAR-MOUNT

This unit be can properly installed either from "Front"(conventional DIN Front-mount) or "Rear"(DIN Rear-mount installation, utilizing threaded screw holes at the sides of the unit chassis). For details, refer to the following illustrated installation methods.

TAKE OUT SCREW BEFORE INSTALLATION

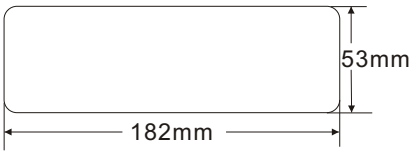
Before install the unit, please remove the two screws .



DIN FRONT-MOUNT (Method A)

Installation Opening

This unit can be installed in any dashboard having an opening as show below:



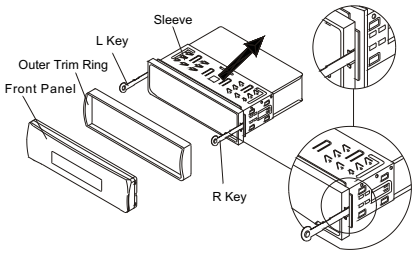
Installing the unit

Be sure you test all connections first, and then follow these steps to install the unit.

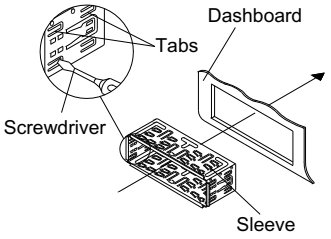
1. Make sure the ignition is turned off, and then disconnect the cable from the vehicle battery's negative (-) terminal.
2. Disconnect the wire harness and the antenna.
3. Press the release button on the front panel and remove the control panel (see the steps of "removing the front panel").
4. Lift the top of the outer trim ring then pull it out to remove it.
5. The two supplied keys release tabs inside the unit's sleeve so you can remove it. Insert the keys as far as they will go (with the notches facing up) into the appropriate slots at the

INSTALLATION

middle left and right sides of the unit. Then slide the sleeve off the back of the unit.

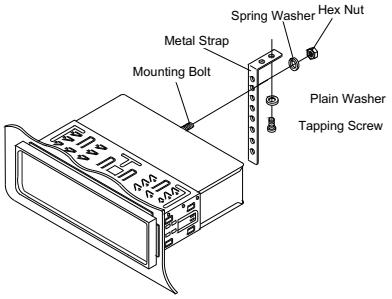


6. Mount the sleeve by inserting the sleeve into the opening of the dashboard and bend open the tabs located around the sleeve with a screwdriver. Not all tabs will be able to make contact, so examine which ones will be most effective. Bending open the appropriate tabs behind the dashboard to secure the sleeve in place.



7. Reconnect the wire harness and the antenna and be careful not to pinch any wires or cables.
8. Slide the unit into the sleeve until it Locks into place.
9. To further secure the unit, use the supplied metal strap to secure the back of the unit in place. Use the supplied hardware (Hex Nut (5mm) and Spring Washer) to attach one end of the strap to the mounting bolt on the back of the unit. If necessary, bend the metal strap to fit your vehicle's mounting area.

   Then use the supplied hardware (Tapping Screw (5x25mm) and Plain Washer) to attach the other end of metal strap to a solid metal part of the vehicle under the dashboard. This strap also helps ensure proper electrical grounding of the unit.
   Note to install the short threading terminal of the mounting bolt to the back of the unit and the other long threading terminal to the dashboard.

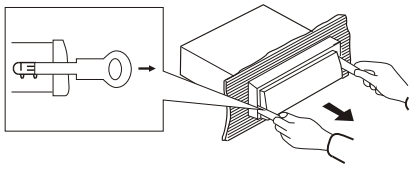


10. Reconnect the cable to the vehicle battery's negative (-) terminal. Then replace the out trim ring and install the unit's front panel (see the step of "installing the front panel").

Removing the unit

1. Make sure the ignition is turned off, then disconnect the cable from the vehicle battery's negative (-) terminal.
2. Remove the metal strap attached the back of the unit (if attached).
3. Press the release button to remove the front panel.
4. Lift the top of the outer trim ring then pull it out to remove it.
5. Insert both of the supplied keys into the slots at the middle left and right sides of the unit, then pull the unit out of the dashboard.

INSTALLATION

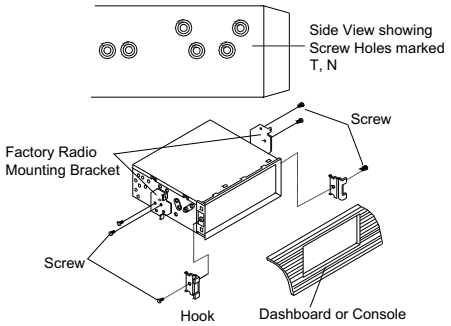


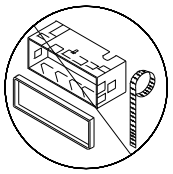
2. Align the screw holes on the bracket with the screw holes on the unit, and then tighten the screws (5x5mm)on each side.

Note: the outer trim ring, sleeve and the metal strap are not used for method B installation.

DIN REAR-MOUNT (Method B)

If your vehicle is a Nissan, Toyota, follow these mounting instructions.
Use the screw holes marked T (Toyota), N (Nissan) located on both sides of the unit to fasten the unit to the factory radio mounting brackets supplied with your vehicle.





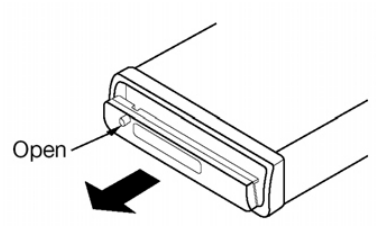
To fasten the unit to the factory radio mounting brackets.

1. Use a screwdriver to loose the hook's screws on the front left and right sides of the unit and remove the hooks.

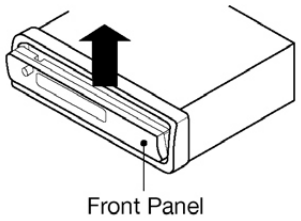
USING THE DETACHABLE FRONT PANEL

To Detach the Front Panel

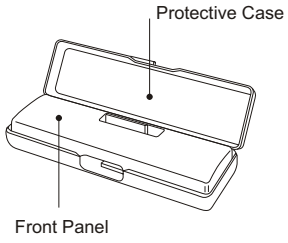
1. Press the **OPEN** button, the front panel will slide down.



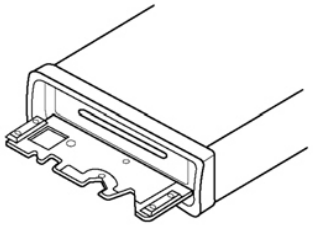
2. Remove the front panel by pulling its middle-hand side outward.



3. For safekeeping, store the front panel in the supplied protective case immediately after being removed.

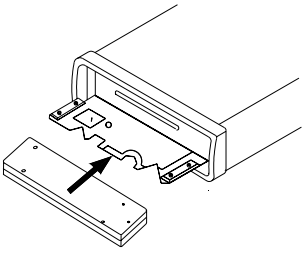


4. Push the front metal plate into the main body. A 'click' sound will be heard.



To Install the Front Panel

1. When the metal plate is folded down, insert the front panel into the metal plate then push them into the main body. A 'click' sound should be heard.

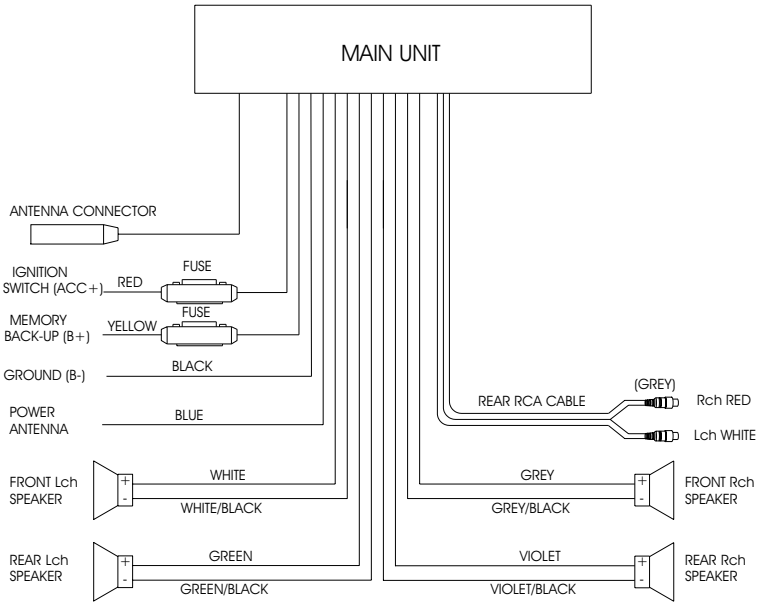


2. Note that if the front panel fails to lock in position properly, pressing control button may not function and the display may be missing some segments. Press the **OPEN** button and then reinstall the front panel again.

Precautions when handling

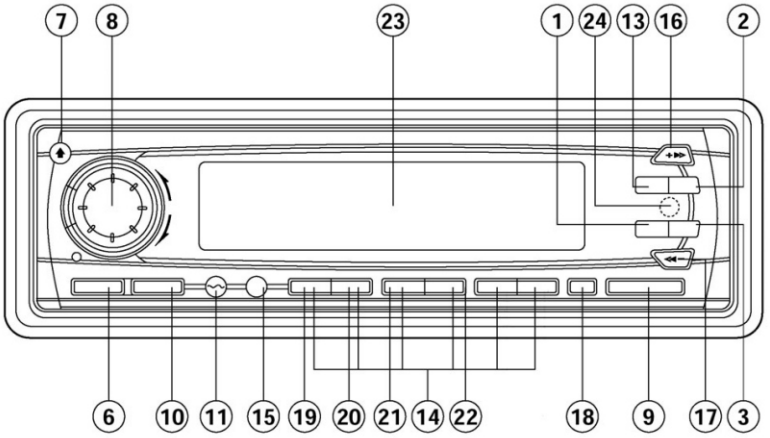
1. Do not drop the front panel.
2. Do not put pressure on the display or control buttons when detaching or reinstalling the front panel.
3. Do not touch the contacts on the front panel or on the main unit body. It may result in poor electrical contact.
4. If any dirt or foreign substances adhered on the contacts, they can be removed with a clean and dry cloth.
5. Do not expose the front panel to high temperatures or direct sunlight in anywhere.
6. Keep away any volatile agents (e.g. benzene, thinner, or insecticides) from touching the surface of the front panel
7. Do not attempt to disassemble the front panel.

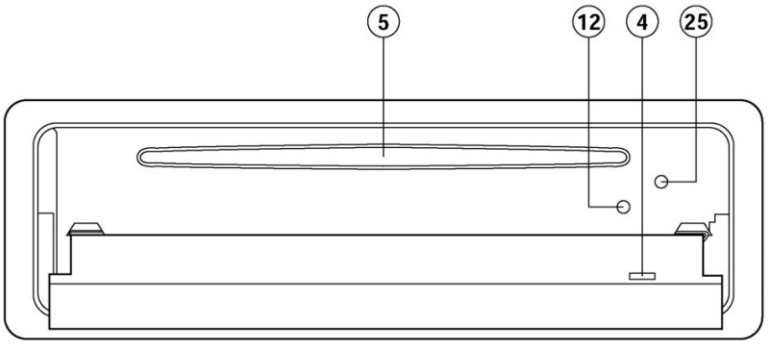
WIRING CONNECTION



OPERATION

LOCATION OF KEYS





OPERATION

SWITCHING ON/OFF THE UNIT AND ILLUMINATING

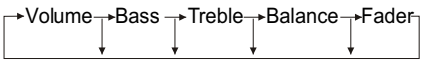
Switch on the unit by pressing any button (except **OPEN** button (7) and **EJECT** button (4)). When system is on, press **POWER/ILL** button (9) shortly to control the brightness of VFD. Press it for several seconds to turn off the unit.

FACEPLATE RELEASE

Press **OPEN** button (7) to fold down the removable faceplate.

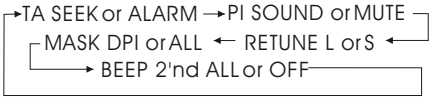
SOUND ADJUSTMENT

Press **SEL** button (10) to shortly select the desired adjustment mode. The adjustment mode will change in the following order:



By rotating the **AUDIO ADJUST** knob (8) clockwise or counter-clockwise, it is possible to adjust the desired sound quality.

Press **SEL** button (10) for several seconds, it is activated as cyclical mode of following functions for user's selection.



a) TA SEEK OR TA ALARM

- TA SEEK mode:
  When newly tuned station does not receive TP information for several seconds, the radio retunes to next station which has not the same station (PI) as the last station, but has the TP information.
  When TP information gets lost at the current station for retune time which is set by RETUNE SHORT (30 sec.) or RETUNE LONG (90 sec.), the radio start to retune to next same PI station. When same PI station does not catch in 1 cyclic search, the radio retunes to next station with TP information.
- TA ALARM mode:
  When this mode is selected, any automatic retune mode is not activated. Only double beep sound (ALARM) is output.
  When newly tuned station does not have TP information for several seconds, beeps come out.
  When TP information gets lost at the current station for retune time, the beep sound is out-putted.
  When newly tuned station has no RDS signal, "PI SEEK" is suppressed somewhat.

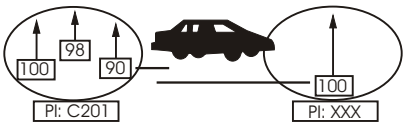
b) PI SOUND or PI MUTE

While AF switching is implemented in C201 station, AF can switch to 100 MHz, which is non genuine AF (where, different PI with same AF) in short "DIP".

If a car cruises that critical area back and forth, an oscillation phenomenon can be occurred, because the different PI code can be received from 100 MHz with "XXX"PI.

The car radio has special procedure to reduce even this kind of unavoidable situation however there is a limit to be escaped from this serious case perfectly.

In that serious case, 2 mode is selectable as follows:



- PI SOUND mode:
  When above different PI sound (DIP) is heard once in a while, the DIP's sound will be heard for a short time.
- PI MUTE mode:
  Under above same situation, a mute sound will be heard for a short time.

c) RETUNE L or RETUNE S mode

The initial time of automatic TA search or PI search modes is selected.

When PI information is not caught for retune time, the radio starts to retune

to next same PI station.
When same PI station does not catch 1 cyclic search, the radio goes to last station and waits for several minutes until PI code is received.
- RETUNE L mode:
  Selected as 90 seconds.
- RETUNE S mode:
  Selected as 30 seconds.

d) MASK DPI or MASK ALL mode
The AF frequency (which has different PI or NO RDS signal with high field strength) is masked during checking PI when the unit searches AF. The unit doesn't search this AF (DIP) for few minutes. In the case of the AF of NO RDS signal with high field strength, if the real AF is wrongly masked as DIP by some interference, the unit hesitates to search real Afs. For this reason, the unit has the user option (MASK DPI) which doesn't mask the AF of NO RDS signal with high field strength. In MASK DPI mode, the wrong sound or long mute (according to PI SOUND or PI MUTE) can be heard from the AF station which has NO RDS signal and of which the field strength is higher than that of the currently tuning AF (station). But, these phenomenons are rare and the user will hardly hear the wrong sound in whole Europe.
- MASK DPI mode:
  Masked only the AF which has different PI.
- MASK ALL mode:
  Masked the AF which has different PI and NO RDS signal with high field strength.

e) BEEP 2'ND, BEEP ALL, BEEP OFF mode
The situation of beep sound is selected. The 3 mode is selected a also rotating **AUDIO ADJUS**T knob (8) lockwise or counter-clockwise.
- BEEP 2'nd mode:
  The beep is only generated when all allowed double key is pressed long (1 sec).
  e.g.
  When preset button (14) is pressed.
  When **BND/LOU** button (13) is pressed.
  When **AMS** button (18) is pressed.
- BEEP ALL mode:
  The beep is generated when every key is pressed.
- BEEP OFF mode:
  The beep is disabled.

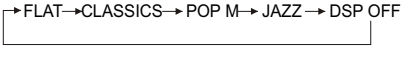
LOUDNESS
Press **BND /LOU** button (13) for several seconds to reinforce the bass output. Press it for several seconds again to release this function.

DISPLAY
Press **DSP** button (15) to operate as the conversion of each display mode as follows:
- In case of receiving a RDS station
  In radio mode:
  ->PS ->CT ->FREQ ->PTY ->
  In CD mode:
  ->CD ->CT ->PS ->FREQ ->PTY ->
- In case of no receiving CT or PTY information, the display shows as "NO CLOCK" or "NO PTY".
- In case of receiving a non RDS station
  In radio mode:
  ->"NO CLOCK" ->FREQ -> "NO PTY" ->
  In CD mode:
  -> CD -> CT -> FREQ -> "NO PTY" ->

Each displaying time is several seconds, and come back to 1st position after several seconds.

Notes:
- CT = clock time
- FREQ = frequency

EQUALIZATION
Press **P-EQ** button (11) to turn on equalization function and to select desired audio mode. There are five kinds of mode as below:



OPERATION

VACUUM FLUORESCENT DISPLAY
Exhibit current frequency and activated functions on the display (23).

FLASHING LED
If the front panel does not install in the main unit, the LED (12) will be flashing.

REMOTE SENSOR
Point the remote control handset to the remote sensor **IR** (24). Press the function keys on the handset to control the system.

ESP FUNCTION
If the unit has the electronic shockproof function, it can be shockproof about several tens of seconds and this depends on the EPROM IC of the unit.

RESET FUNCTION
RESET button (25) must be activated with either a ballpoint pen or thin metal object.
The **RESET** button is to be activated for the following reasons:
- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate.
- Error symbol on the display.

Note: if press **RESET** button (25), the unit can't work yet, please use a cotton swab soaked in isopropyl alcohol to clean the socket on the front panel.

RADIO OPERATION

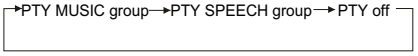
- **SWITCHING TO RADIO MODE**
  Press **MODE** button (6) shortly to select radio mode, the radio mode appears in the display together with the memory band an frequency.
- **SELECTING THE FREQUENCY BAND**
  At radio mode, press **BND/LOU** button (13) shortly to select the desired band. The reception band will change in the following order:

  FM1 → FM2 → FM3 → MW

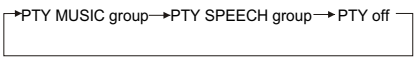
- **SELECTING STATION**
  Press **MANU/SKIP +►►** button(16) or button **MANU/SKIP ◄◄−** (17) shortly to activate automatic seek function. Press for several seconds until "**MANUAL**" appears on the display, the manual tuning mode is selected. If both buttons have not been pressed for several seconds, they will return to seek tuning mode and "**AUTO**" appears on the display.
- **AUTOMATIC MEMORY STORING & PROGRAM SCANNING**
  - Automatic memory storing
    Press **AMS** button (18) for several seconds, the radio searches from the current frequency and checks the signal strength until one cycle search is finished. And then 6 strongest stations are stored into the corresponding preset number button.
  - Program scanning
    Press **AMS** button (18) shortly to scan preset station, When the field strength level is more than the threshold level of stop level, the radio is holding at that preset number for several seconds with release mute, then searches again.
- **STATION STORING**
  Press any one of the preset buttons (14) (1 to 6) to select a station, which had been stored in the memory. Press this button for several seconds (until 2ND beeps come out), current station is stored into the number button.

OPERATION

- **RDS (RADIO DATA SYSTEM) OPERATION**
  - Setting RDS mode
    Press **AF** button (3) and release immediately to switch on or off RDS mode.
    Whenever RDS is switch on, symbol "**AF**" appears on the display. Program name is displayed on receiving a RDS station.
    "**AF**" starts blinking if the broadcasting signal getting worse.
    "**ALARM**" will be displayed when an emergency broadcasting is received, meanwhile sound output level will be adjusted to the preset output level automatically when the volume control is set at minimum.
  - Regional Program Operation
    Press **AF** button (3) for several seconds to switch on or off region mode.
    Some broadcasting stations change their program from normal broadcasting to regional broadcasting for a certain time period. When region is on, the current listening program remains unchanged. When region is off, it allows the reception moves to the regional station.
  - Using **PTY** to Select Program
    PTY button (1) is operated as follows:



While selecting **PTY** engagement, its selection is implemented by preset buttons as described in notes.
When **PTY** is selected, the radio starts to search corresponding **PTY** information, and stops if the corresponding **PTY** information is detected.
If corresponding **PTY** information is not existed any more, **PTY** engaging is automatically exit to normal mode.
Notes:
When **PTY** mode is engaged, the **PTY** switch is shared as follows:



According to above 2 allotted group, the preset number is used for **PTY** selection as follows:

MUSIC group
* POP M, ROCK M
*EASY M, LIGHT M
*CLASSICS, OTHER M
*JAZZ, COUNTRY
*NATION M, OLDIES
*FOLK M

SPEECH group
*NEWS, AFFAIRS, INFO
*SPORT, EDUCATE, DRAMA
*CULTURE, SCIENCE, VARIED
*WEATHER, FINANCE, CHILDREN
*SOCIAL, RELIGION, PHONE IN
*TRAVEL, LEISURE, DOCUMENT

- Listening to Traffic Announcement
  TA button (2) is operated as follows:
  When pressed short, it is engaging whether **TA** mode on or off.
  When **TA** mode is on and a traffic announcement is transmitted:
  When the unit was in CD (MP3), it will switch temporarily to radio mode.
  Temporary switch over to an EON linked station when EON detects a traffic announcement on that other program.
  If the volume level was under the threshold point it will be raised to the threshold point. But the user changed the volume level, which was more than the threshold point (min. **TA** volume level), it will be set to the last level.
  When **TA** mode is on, **TA** of individual segment is turned on.
  When a TP station is received, TP of individual segment is turned on.
  TA interruption function
  The current traffic announcement is cancelled by pressing this key.
  But the **TA** mode will not be off.
  When pressed long, it is selected

EON TA LOCAL/EON TA DISTANCE mode.
The purpose of this key is to reduce unwanted EON TA switching, which EON TA information was received from current station and the radio switched to that EON linked station, but no information could not be received because the EON linked station is located too far from that area. So the radio is switched back to current station again. In above operation, a customer listens to a wrong program or mute sound for a while.
EON TA LOCAL mode
When the filed strength level of EON linked is less than threshold level, the radio does not switch that station, and a customer can hardly listen to any disturbances.
When EON TA LOCAL mode is selected, “EON TA LO” on numeric display is indicated for a few seconds.
EON TA DISTANCE mode
EON TA switch is tried to implemented by the information of current station.
When EON TA DISTANCE mode is selected, “EON TA DX” on numeric display is indicated for a few seconds.
The RDS data used are the PI, PS, AF, TP, TA, EON and PTY data.
PI: Program Identification code
Code for identifying programs
PS: Program Service Name
Broadcast station name data expressed in alphanumerically characters
AF: Alternative Frequencies
Frequency list of broadcasting stations transmitting the same program
TP: Traffic Program Identification
Identification data for traffic information-broadcasting station
TA: Traffic Announcement Identification
Identification data showing traffic information is being transmitted or not
EON: Enhanced Other Networks Information
Broadcasting information on PI, AF, TP, TA, etc, relating to networks other than the network used for current reception
PTY: Program Type Code
Contents of programs such as news, light music, sports etc.

DAB (DIGITAL AUDIO BROADCAST) OPERATION

- **SWITCHING TO DAB MODE**
  Press **MODE** button (6) shortly to select DAB mode.
  KEY MAP OF DAB MODE
  AMS (18): LOCAL SCAN -> DAB SCAN DISPLAY
  BND/LOU (13): ENTER (ONLY SERVICE LIST ORDER)
  DSP (15): SEE THE BELOW
  PTY (1): SERVICE LIST ORDER (SEE THE BELOW)
  MANU/SKIP UP/DOWN (16) (17)
- **DISPLAY KEY (15)**
  (1) SERVICE NAME OF 8 CHARACTER
  (2) DLS MESSAGE (UP TO 128 CHARACTER)
  20 SECONDS TIME OUT
  (3) PROGRAM TYPE
  10 SECONDS TIME OUT
  (4) MULTIPLEX (ENSEMBLE) NAME OF 16 CHARACTER)
  10 SECONDS TIME OUT
  (5) DATE & TIME (NO TIME OUT)
  (6) SIGNAL QUALITY (NO TIME OUT)
  (7) BACK TO (1)
- **PTY KEY (1)**
  SERVICE ORDER SETTING MODE
  ALPHANUMERIC ORDER ->
  FAVOURITES ORDER ->
  FAVOURITES TO PRESET-> TIDY STATIONS (REMOVE INACTIVE STATIONS)
  AFTER SELECT THEN PRESS ENTER (BND/LOU) BUTTON.

OPERATION

- **6 PRESET KEY**
  LOAD FROM MEMORY AND
  SAVE TO MEMORY PLAY
- **MODE CHANGE (6)**
  RADIO-> DAB-> S-CDP-> RADIO
  (1) RADIO
  1) FM1
  2) FM2
  3) FM3
  4) MW
  5) LW
  (2) DAB
  (3) S-CDP

- **MAIN RESET OCCURRED, DAB MODULE GOES TO FACTORY RESET MODE AND OPERATE LOCAL SCAN WHEN DAB MODE IS SELECTED.**

CD OPERATION

- **SWITCHING TO CD MODE**
  If there is no CD inserted in the driver:
  Gently insert the CD with the printed side uppermost into the CD compartment until you feel some resistance,. The CD is drawn into the driver automatically , CD playback begins.
  If a CD is already inserted in the driver:
  Keep pressing **MODE** button (6) shortly until the CD mode display appears.

- **SELECTING TRACKS**
  Press **MANU/SKIP**⏮ button (17) or **MANU/SKIP** ⏭ button (16) to move to the previous track or the following track. Track number shows on display.
  Hold **MANU/SKIP** ⏮ button (17) or **MANU/SKIP** button ⏭ (16) to fast reverse of fast forward, CD play starts from when you release the button.

- **PAUSING PLAYING**
  Press **PAU** button (19) to pause CD player, Press it again to resume play.

- **PREVIEWING ALL TRACKS**
  Press **SCN** button (20) to play first several seconds of each track on the current disc, Press again to stop intro and listen to track.

- **REPEATING THE SAME TRACK**
  Press **RPT** button (21) to continuously repeat the same track, Press it again to stop repeat.

- **PLAYING ALL TRACKS IN RANDOM**
  Press **SHF** button (22) to play all tracks on CD in random order. Press again to cancel the function.

- **EJECTING A DISC**
  Press **EJECT** button (4) to stop CD playing and eject the disc from the disc slot (5).

MP3 OPERATION

- **SWITCHING TO CD (MP3) MODE**
  If there is no MP3 disc inserted in the driver:
  Gently insert the MP3 disc with the printed side uppermost into the disc slot (5) until you feel some resistance. The MP3 disc is drawn into the driver automatically. The MP3 playback begins.
  If a MP3 disc is already inserted in the driver:
  Keep pressing **MODE** button (6) shortly until the CD (MP3) mode display appears.

OPERATION

- **EJECTING A DISC**
  When the front panel is sliding down, press **EJECT** button (4) to stop CD playing and eject the disc from the disc slot (5).
- **EJECTING TRACKS IN SINGLE STEP**
  Press **MANU/SKIP** ⏮ button(17) or **MANU/SKIP** ⏭ button(16) to move to the previous track or the following track, Track number shows on display.
- **PAUSING PLAYING**
  Press **PAU** button (19) to pause MP3 player, Press it again to resume play.
- **PREVIEWING ALL TRACKS**
  Press **SCN** button (20) to play first several seconds of each track on the current disc. Press again to stop intro and listen to track.
- **PREVIEWING THE SAME TRACK**
  Press **RPT** button (21) to continuously repeat the same track, Press it again to stop repeat
- **PLAYING ALL TRACK IN RANDOM**
  Press **SHF** button (22) to play all tracks on MP3 disc in random order. Press again to cancel the function.
- **SELECTING TRACK BY AMS/MP3 BUTTON**
  AMS button is assigned as Digital Audio Mode selection button in MP3 operation, When pressed, it is activated as selecting each mode of Digital Audio. "Selecting track directly" =>"Searching Directory or File Name" =>"Navigation" from root by **MANU/SKIP UP/DOWN** buttons=> "Navigation" from current directory by **MANU/SKIP UP/DOWN** buttons
  - **Searching Track Directly**
    Press **AMS(MP3)** button for one time. It enters into "Searching track directly" in Digital Audio CD.
    The unit searches the track selected by following direct numeric buttons:
    M1-M6, MOD (7), **MANU/SKIP DOWN**(8), **MANU/SKIP UP** (9), **DSP**(0).
    If selected three digits, the unit searches the tract at once. if selected one or two digits, the unit wait for **ENTER (BND/LOU)** button for seconds. The unit searches the track after few seconds, even if the enter button is not pressed.
  - **Searching Directory or file Name**
    Press **AMS (MP3)** button for two times. It enters into "Searching Directory or File Name" in Digital Audio CD.
    The unit searches files and directories that have the same character which is inputted by the user pressing the corresponding buttons listed on the Table 1 below.
    Explain as follows:
    - Use the corresponding buttons to select the characters A to Z, blank, 0-9, _ , - , + .
    - Press **SEL** button to confirm entry of each characters.
    - Press **BND /LOU (ENTER)** button to start the title search,

    In case the selected title is a directory name, display will show(' '), then
    - Use the **MANU/SKIP UP/DOWN** button to list all songs under this directory and select the title.
    - Press **BND/LOU (ENTER)** button to confirm and start the play.
    - Repeat the above steps if the newly selected title is again a directory.
  - **Searching From Root Directory**
    Press **AMS** (MP3) button for three times. The unit searches fire or directory from root by **MANU/SKIP UP/DOWN** buttons (D-DIR icon turns on if the name is directory). Display will list all available directories and songs. Select the

desired directory/songs by using **MANU/SKIP UP/ DOWN** button and **BND/LOU (ENTER)** button to confirm. If the selected title is a song, it starts to play.
If the selected title is a directory name, display will show (' '), then
- Use the **MANU/SKIP UP/DOWN** buttons to list all songs under this directory and select the title.
- Press **BND/LOU (ENTER)** button to confirm and start the play.
- Repeat the above steps if the newly selected title is again a directory.

- **Searching From Current Directory**
Press **AMS (MP3)** button for four times. The unit searches fire or directory from current directory by **MANU/SKIP UP/DOWN** buttons. (D-DIR icon turns on if the name is directory). The current directory name is displayed for a second and the currently playing file name is displayed (selected). The user can select the directory or file in the directory by **MANU/SKIP UP/DOWN** buttons. The selected] file can be played by pressing **BND/LOU (ENTER)** button.

"MP3" icon turns on when MP3 disc is played and blinks when it is in navigation mode.

- **DISPLAY INFORMATION**
Press **DSP** button to show the following information, such as the clock, ID3 TAG (if available: song title, directory name, artist name, other contents...) and other information.

KEY Assigned IN Searching mode (Table 1)

AMS	Mode Select
BND/LOU	ENTER
M1	A, B, C, 1
M2	D, E, F, 2
M3	G, H, I, 3
M4	J, K, L, 4
M5	M, N, O, 5/Directoty DOWN
M6	P, Q, R, 6/Directory UP
MODE	S, T, U, 7
MANU/SKIP DOWN	V, W, X, 8
MANU/SKIP UP	Y, Z, SPACE, 9
SEL	CHARACTER SHIFT RIGHT
DSP	_,-,+,0
AUDIO ADJUST KNOB	CHARACTER SELECT (A, B~8,9,0)

AUDIO ADJUST KNOB (ENCODER) & MANU/SKIP UP/DOWN buttons: Searching file and directory during Navigation.

OPERATION

DISC NOTES

A. Notes on discs:

1. Attempting to use non-standard shape discs (e.g. square, start, heart) may damage the unit. Be sure to use round shape CD discs only for this unit.
2. Do not stick paper or tape, etc, onto the label side or the recording side of any discs, as it may cause a malfunction.
3. Dirt, dust, scratches and warping discs will cause misoperation.

B. Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs):

1. Be sure to use discs with following marks only for the unit to play:

2. The unit cannot play a CD-R and CD-RW that is not finalized. (Please refer to the manual of your CD-R/CD-RW recorder or CD-R/CD-RW software for more information on finalization process).

3. Depending on the recording status, conditions of the disc and the equipment used for the recording, some CD-Rs/CD-RWs may not be played on this unit. (see *1)

   *1: To have more reliable play back, please see following recommendations:
   a: Use CD-RWs with speed 1x to 4x and write with speed 1x to 2x.
   b. Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.
   c. Do not play a CD-RW which has been written for more than 5 times.

C. Notes on MP3 files (MP3 Version Only):

1. The disc must be in the ISO9660 level 1or level 2 format, or Joliet or Romeo in the expansion format.
2. When naming a MP3 file, be sure the file name extension is ".MP3".
3. For a non-MP3 file, even though the file name extension is ".MP3", the unit cannot recognize it.

SPECIFICATION

GENERAL

Power Supply Requirements	: DC 12 Volts, Negative Ground
Chassis Dimensions	: 178 (W) x 165 (D) x 50 (H)
Tone Controls	
- Bass (at 100 Hz)	: ±10 dB
- Treble (at 10 kHz)	: ±10 dB
Maximum Output Power	: 4x40 watts
Current Drain	: 15 Ampere (max.)

CD PLAYER

Signal to Noise Ratio	: More than 55 dB
Channel Separation	: More than 45 dB
Frequency Response	: 40Hz - 18 kHz

RADIO

	FM
Frequency Coverage	: 87.5 to 108 Mhz
I.F.	: 10.7 Mhz
Sensitivity (S/N=30dB)	: 4μV
Stereo Separation	: >25 dB
	MW
Frequency Coverage	: 522 to 1620 kHz
IF	: 450 kHz
Sensitivity (S/N=20dB)	: 36 dBu

TROUBLE SHOOTING

Before going through the checklist, check wiring connection. If any of the problems persist after checklist has been made, consult your nearest service dealer.

Symptom	Cause	Solution
No power.	The car ignition switch is not on.	If the power supply is properly connected to the car accessory circuits, but the engine is not moving, switch the ignition key to "ACC"
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected.	Presence of CD disc inside the player.	Remove the disc in the player, then put a new one.
	Inserting the disc in reverse direction.	Insert the compact disc with the label facing upward.
	Compact disc is extremely dirty or defective disc.	Clean the disc or try to play a new one.
	Temperature inside the car is too high.	Cool off or until the ambient temperature returns to normal.
	Condensation.	Leave the player off for an hour or so, then try again.
No sound.	Volume is in minimum.	Adjust volume to a desired level.
	Wiring is not properly connected.	Check wiring connection.
Sound skips.	The installation angle is more than 30 degrees.	Adjust the installation angle less than 30 degrees.
	The disc is extremely dirty or defective disc.	Clean the compact disc, or try to play a new one.
The operation keys do not work.	The built-in microcomputer is not operating properly due to noise.	Press the RESET button. Front panel is not properly fix into its place.
The radio does not work. The radio station automatic selection does not work.	The antenna cable is not connected.	Insert the antenna cable firmly.
	The signals are too weak.	Select a station manually.